Magellan User Services

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Welcome to Magellan Day

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Magellan is a Experimental Testbed for Cooperative Cloud Research

- Opportunity for Users To
  - Experiment with Clouds for HPC
  - Customize a Cloud Environment to Meet Specific Needs
  - Drive the Evolution of Clouds for HPC
  - Use Cloud Computing to Advance Science
- Opportunity for the Magellan Team To
  - Learn the Demands of HPC in a Cloud Environment
  - Determine the Best Architecture and Services
  - Rapidly Evolve the Cloud Based on User Experience

Magellan Allocation Process

- Determine the Project's Science and Cloud Goals
  - Project Should Be Demanding, But Not on a Critical Path
- Identify Argonne Collaborator (LCF or MCS)
- Request a Project Through Magellan Website
  - Project Description
  - Hours, Environment Required
- Allocation Committee Meets Weekly
  - May Request More Information
  - Should be Notified Within a Few Weeks of Request

Magellan Account Creation

- Project is Created

- Project is Assigned an Allocation and Point-of-Contact

- PI's ALCF Account is Created

- User Requests Access to Project

- PI Approves Request

- User's ALCF Account is Created (If Needed)

- User's Magellan Account is Created (If Needed)

- User is Added to the Project

Magellan Terms

- Project – Set of People and Software with a Specific Goal
- Principle Investigator (PI) – Manages Projects, Users and Allocation
- Co-PI – Authorized by PI to Act in Place of PI
- Allocation – Number of Core Hours Provided for the Project
- User - Individual with Privileges to Run Magellan VMs
- ALCF Account – Web-Based Account Allows Resource Requests and Group Management
- Magellan Account – Eucalyptus Account Allows Building and Running VMs

Magellan Account Usage

- Log into Magellan via Web Browser

- Changes Password

- Generates and Downloads Credentials (X.509 Certificate)

- Downloads EC2 Command Line Tools

- VM Requests Should be Submitted with Specific Project Listed
  - Exact Mechanism is Under Development

Community Support

- Primary Magellan Support is "Users-Helping-Users"
  - Through mailing list, forum, wiki, and meetings
- All Magellan Users are Expected to
  - Contribute to the Discussion
  - Write and Update Documentation
  - Provide Frequent Feedback
- We Expect Domain-Specific Communities to Form
  - Bio, Energy, Climate, …
  - MPICH, BLAST, …

Getting Help

- Magellan Website (magellan.alcf.anl.gov)
  - Allocation Requests, User Documentation, General Information
- ALCF Website (www.alcf.anl.gov)
  - Staff Contact Information, ALCF Account Management
- magellan-support@alcf.anl.gov
  - Account and Systems Issues
- magellan@alcf.anl.gov
  - Community discussion and resource sharing
- Wiki.magellancloud.org
  - Community-written documentation
- Forums (coming soon...)

Reporting

- All Projects are Expected to Report
  - Science Results
  - Cloud Results
- ALCF Will Be Reporting Results to DOE
  - Feedback, Visualizations, Images, etc. Are Needed
- Please Cite ALCF Magellan in All Papers and Presentations